## IDAHO COMPREHENSIVE STATE WATER PLAN

## **Payette River Basin**

## **PLAN SUMMARY**

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## PLAN SUMMARY

## **BACKGROUND**

In February 1991 the Idaho Water Resource Board adopted the *Comprehensive State Water Plan: Payette River Reaches* that was approved by the Idaho Legislature in April 1991. The Payette River Reaches Plan examined segments of the North Fork Payette River from Cabarton Bridge to Banks, the South Fork Payette River from the Sawtooth National Recreation Area boundary to Banks, and the main Payette River from Banks to Black Canyon Dam. Segments of the North Fork, South Fork and main Payette rivers were designated as state recreational rivers.

The Board began a review of the Payette River Reaches Plan in 1995, but decided to prepare a comprehensive state water plan for the entire Payette River Basin instead of updating the Payette River Reaches Plan. The Payette River Basin Plan describes and evaluates water resources and related economic, cultural, and natural resources in the basin. The plan takes actions and recommends water policy and water resource management options to improve, develop, and conserve the water resources of the Payette River Basin. Goals, objectives, actions, and recommendations contained in the plan were developed with the help of a Payette River Citizens Group, comprised of individuals representing various water users in the basin.

## **BASIN OVERVIEW**

The Payette River is a major tributary to the Snake River, draining a 3,320 square mile watershed in west-central Idaho. Approximately 4,000 stream miles delineate the basin. Three major branches, the North, Middle, and South forks, conveying water

from the mountainous headwaters, converge at the southwestern edge of the Idaho batholith to form the Payette River. The confluence of the South and Middle forks in Garden Valley, 80.7 miles upstream from the mouth, forms the Payette River proper. However, the eight-mile stretch from the Middle Fork Payette confluence to Banks is locally known as part of the South Fork Payette, and is referred to as such in the plan.

About 60 percent of the basin is public land. The estimated amount of water entering the basin each year as precipitation is about 5.3 million acrefeet. The amount leaving the basin as the annual flow volume of the Payette River at Payette is 2.2 million acrefeet are diverted or lost through evapotranspiration by native vegetation and crops, through evaporation from open water and bare ground, or ground water recharge. An unknown volume leaves the basin as ground water discharge into the Snake River.

The Payette River Basin is rural, with an estimated population of 37,000 people in 1996.

Major population centers include Payette, Emmett, Fruitland, McCall, New Plymouth, Cascade, Horseshoe Bend, Donnelly, and Crouch. Average annual population growth rates for the basin exceed the state average for the period from 1970 to 1996.

Major industries are agriculture (farming and ranching), timber, and recreation. Irrigated agriculture mainly occurs in two areas of the basin: the lower Payette Valley below Emmett, and Long Valley between McCall and Cabarton. Smaller valleys have some irrigated agriculture as well. Approximately 33 percent of the basin is considered

tentatively suitable for timber harvest. The basin is characterized by 60,000 surface acres of boatable rivers, lakes, and reservoirs, comprising 9.1 percent of the state total. Five of the sixteen lakes in the state managed for a trophy or quality trout angling experience occur in the Payette River Basin. Winter sports are an important sector of the economy for upper basin communities.

### PLANNING APPROACH

The planning process encompassed six steps which are described below. Not all steps occurred in the order presented. Some occurred throughout the planning process and/or simultaneously with others.

- 1) *Inventory resource attributes* The resource attribute inventory is contained in the Payette River Basin Plan. Resource information, figures, and statistics for this plan were obtained through inhouse analysis, literature review, field reconnaissance, contact with state and federal agency personnel, and citizen input. Maps of resource data were prepared at a scale of 1:24,000 using a geographic information system (GIS). Resource data were reviewed for accuracy by government agencies, a local citizens group, and interested public.
- 2) *Identify local issues, concerns, and goals* Issues, concerns, and goals related to water use and management framed the scope of the Payette River Basin Plan. These were identified through meetings with the public, management agencies, local officials, and a citizens group.
- 3) Assess current and potential water uses and constraints An assessment of current and potential water uses and constraints is contained in the Payette River Basin Plan. This information was obtained by review of water right files, pertinent literature, regulations and law, and discussion with agency personnel.

- 4) Assess and identify river segments with outstanding resource values Waterways possessing outstanding fish and wildlife, recreation, scenic, or geologic values are eligible for state designation as natural or recreational waterways (Idaho Code, Sec. 42-1731). Outstanding resources are indicated by unique or rare features regionally or nationally, and/or legal protection or special agency management designation to protect important resource values. Specific criteria for defining outstanding fish and wildlife, recreation, and scenic resources are described in the Payette River Basin Plan.
- 5) *Develop alternatives or strategies* Strategies may be actions, recommendations, or policies responding to the issues and concerns identified, and intended to achieve the selected goals. They represent alternatives proposed by the public and agencies, and considered by the Board.
- 6) *Determine actions and recommendations* After considering alternatives and the public interest, actions and recommendations relative to improving, developing, and conserving water resources were identified by the Board. Many actions and recommendations were the result of consensus achieved at Payette River Citizens Group workshops.

#### PUBLIC PARTICIPATION

Public involvement is an important part of the planning process. Input from local citizens is necessary in assessing viewpoints and conditions in the basin. Information meetings, agency consultation, and citizens group workshops provided opportunity for public critique and suggestions for the Payette River Basin Plan. Public information meetings were conducted April through May 1997 in McCall, Donnelly, Cascade, Lowman, Crouch, Horseshoe Bend, Sweet, Ola, Emmett, New Plymouth, Payette, and Boise to inform the public about preparation of a Payette River Basin Plan, and to ask the public to identify issues and concerns. In

1998 another public information meeting was held in Horseshoe Bend, announcing the formation of a citizens group and summarizing the issues identified at the Spring 1997 meetings.

The Payette River Citizens Group was formed in March 1998 to inform the Board and its staff about local concerns, review information used in the development of the plan, and provide feedback and suggestions for the Board's consideration. The group consisted of individuals representing various water users in the basin, including, but not limited to, irrigators, local government, property owners, fishermen, boaters, other recreationists, ranchers, timber industry, and hydropower. People representing these users were invited to participate to ensure all interests were represented and heard. However, membership and participation on the Citizens Group was open; any interested individual could be a member by attending the workshops.

The Board held a series of five Payette River Citizens Group workshops in April through June 1998. During these workshops, the Citizens Group ranked issues, developed goals, and identified actions and recommendations to submit to the Board. About eighty individuals attended one or more of these workshops. Newsletters were circulated through the U. S. Postal Service or Internet to an additional 312 individuals that summarized the development of the Payette River Basin Plan, announced Citizens Group workshops, and requested comment on key pieces of information

## Summary of Public Comment on Draft Payette River Basin Plan

The Board circulated a Draft Comprehensive State Water Plan for the Payette River Basin on November 9, 1998 for a sixty-day comment period. Information meetings and hearings occurred in Cascade, Horseshoe Bend, and Boise in November and December 1998 to discuss and receive comment on the draft plan. Thirty-four people testified at the public hearings and sixty-eight written comments were received prior to the close of the comment period on January 8, 1999.

The majority (72 percent) of comments supported the actions and recommendations contained in the Draft Payette River Basin Plan. Fourteen percent of the comments received did not support the Draft Plan. Most of these comments concerned three main areas, including 1) designation of about 193 miles of bull trout focal habitat as state recreational rivers; 2) a proposal to process a water right application for a minimum stream flow below Payette Lake; and 3) a request to amend recreational river designations on the South Fork and main Payette rivers to allow recreational mining. The Board reexamined these actions and reviewed some additional information.

Actions and recommendations contained in the Draft Payette River Basin Plan were revised or expanded in response to these concerns. The Board adopted a *Final Comprehensive State Water Plan for the Payette River Basin* on February 5, 1999. The Final Plan was then presented to the Legislature for its consideration as required by Section 42-1734B of the Idaho Code. A summary of the public review schedule follows:

- Public Comment Period *November 9, 1998 to January 8, 1999*
- Public Information Meetings in Cascade,
   Horseshoe Bend, and Boise November 1998
- Public Hearings in Horseshoe Bend and Boise
- December 1998
- Board Adoption of Final Plan *February 5*, 1999
- Submit to Legislature for Approval February 8, 1000
- Signed by Governor March 26, 1999

### GOALS AND OBJECTIVES

The statute provides some guiding criteria for the Board in developing a comprehensive state water plan. These are found at Idaho Code 42-1734A and include:

- 1. Existing rights, established duties, and the relative priorities of water established in the Idaho Constitution will be protected and preserved.
- 2. Optimum economic development in the interest of and for the benefit of the state as a whole will be achieved by integration and coordination of the use of water, the augmentation of existing supplies, and the protection of designated waterways for all beneficial purposes.
- **3.** Adequate and safe water supplies for human consumption and maximum supplies for other beneficial uses will be preserved and protected.
- **4.** Minimum stream flows for aquatic life, recreation, aesthetics, water quality, and the protection and preservation of waterways will be fostered and encouraged. Consideration will be given to the development and protection of water recreation facilities.
- **5.** Watershed conservation practices consistent with sound engineering and economic principles will be encouraged.

Additional goals and objectives contained in the Payette River Basin Comprehensive State Water Plan reflect local concerns, current and future uses of water, and the resource values of the basin. Discussions about priority issues by the Payette River Citizens Group identified some general wants and needs, or desired outcomes, falling into ten categories. Goals were developed to address these desires. Goals are general statements about citizens' desired future for the basin. The Payette River Citizens Group developed, discussed, and reviewed goals at workshops conducted in May and June 1998. The following lists the goals developed and supported by the Citizens Group for each issue category.

#### State Protected Rivers Designations

1. Recognize and maintain the outstanding fish and wildlife, aesthetic, recreation, and geologic values of waterways in the Payette River Basin.

#### Water Allocation

- **2.** Work toward cooperation among all water users for optimum use of the Payette River Basin's water resources.
- **3.** Maintain flexibility when providing water for different uses to address changing demands, while recognizing existing water rights and contracts in accordance with state law.
- **4.** Support the management of the water delivery system to meet irrigation water rights and contracts, and other objectives such as water quality, flood management, private property, fisheries, wildlife, energy, and recreation needs.

#### Water Storage and Delivery

- **5.** Improve the efficiency of surface water delivery systems where cost effective and beneficial.
- **6.** Identify and protect potential water storage opportunities in the basin for the purposes of municipal water supply, irrigation, and flood management.

#### Municipal Water Supply

7. Maintain or develop an adequate supply of

good quality water to meet present and future municipal needs.

#### Water Quality

- **8.** Maintain, improve, and protect water quality of all surface and ground water within the Payette River Basin.
- **9.** Improve coordination between the Idaho Division of Environmental Quality, Idaho Department of Water Resources, Health Districts, and local governments to manage, maintain, or enhance the basin water quality.

#### Flood Management

- **10.** Minimize potential flood damage by managing riparian zones and open space along streams and rivers.
- 11. Repair damage from the 1997 flood.
- **12.** Improve maintenance and management of the levee system along the Payette River from Horseshoe Bend to its mouth.
- **13.** Update floodplain mapping in the Payette River Basin.

#### Resource Development

- **14.** Recognize and consider the importance of industrial resources in the basin, such as timber, minerals, and agriculture, in maintaining a viable economy.
- **15.** Consider the economic feasibility of hydropower projects that maintain or enhance environmental quality, and provide economic benefits to the basin.
- **16.** Encourage energy conservation and development of hydropower at existing structures where feasible.

#### **Fisheries**

**17.** Improve the quality of fisheries in the basin.

#### Agency Planning and Coordination

- **18.** Improve the efficiency of the permitting process for stream channel alterations, particularly during emergencies.
- **19.** Encourage or improve coordination among the agencies, private landowners, and public in managing the resources in the Payette River Basin.

#### Recreation

- **20.** Recognize and consider the positive economic and social values of recreation and tourism in the basin.
- **21.** Maintain the diversity and quality of recreation opportunities on the Payette River system.
- 22. Minimize water-related recreation user impacts in the basin, such as environmental damage, adverse social impacts, and the cost of public services, while maintaining aesthetic, recreational, and environmental qualities.

# ACTIONS AND RECOMMENDATIONS

Actions and recommendations of the Board are consistent with Idaho law, the *Idaho State Water Plan*, private property rights, and local and state management plans. Actions and recommendations were developed after considering the desires of local citizens of the basin and region. They recognize public consensus achieved at Payette River Citizens Group workshops conducted in May and June 1998, and public comment received on the Draft Payette River Basin Plan in November 1998 through January 1999.

The Board has constitutional and statutory authority to formulate and implement the State Water Plan, including designating state protected rivers, filing applications to appropriate water for instream flows or other uses beneficial to the public, providing funds for water projects, undertaking

special water projects, administering the water supply bank, and when requested by the Governor, representing the State in water right negotiations with the federal government and tribes. Other state agencies are required to "exercise their duties in a manner consistent with the comprehensive state water plan" [Idaho Code 42-1734B(4)]. All local and federal agencies are encouraged to administer their activities to help achieve the actions and recommendations contained in the *Comprehensive State Water Plan for the Payette River Basin*.

### **Actions**

The Payette River Basin Plan comprises a review and analysis of present needs, and future needs, and opportunities for fifteen resource categories specified by the Idaho Legislature.

Resource categories include navigation; power development; energy conservation; fish and wildlife; recreational opportunities; irrigation; flood control; water supply; timber; mining; livestock watering; scenic values; natural or cultural features; domestic, municipal, commercial, and industrial water use; and other aspects of environmental or economic development [Idaho Code 42-1734A(3)]. A need was identified to designate certain river reaches as state protected rivers to preserve current values for Idaho.

## STATE PROTECTED RIVER DESIGNATIONS

A comprehensive state water plan may designate waterways as "natural" or "recreational." As defined by the Idaho Code, a recreational or natural river is "a waterway that possesses outstanding fish and wildlife, recreation, geologic, or aesthetic values" [Idaho Code 42-1731 (7) and (9)]. A "natural" or "recreational" designation refers to the level of development in the river corridor. Natural rivers are free of substantial man-made development in the waterway, and the riparian area

is largely undeveloped. Recreational rivers may include man-made development in the waterway or the riparian area. A designation is made only if the Board determines the value of preserving the waterway is in the public interest and outweighs developing the river for other beneficial uses.

The Board believes state protected river designations are preferable to federal protection, and are in the best interests of Idaho residents. Federal protection limits the flexibility of planning for the reach, and removes the option of amending the designation by action of the Board and Legislature. Federal agencies are encouraged to manage lands to compliment state protection designations.

Pursuant to Idaho Code 42-1734A(6), the following activities are prohibited within the stream channel or below the high water mark on the reaches designated "natural" rivers:

- construction or expansion of dams or impoundments;
- construction of hydropower projects;
- construction of water diversion works;
- · dredge or placer mining;
- alterations of the stream bed; and
- mineral or sand and gravel extraction within the stream bed.

The Board determines which of the above prohibitions apply to rivers designated "recreational." Prohibitions for natural or recreational designations do not interfere with activities necessary to maintain and improve existing utilities, roadways, managed stream access facilities, and diversion works, and for the maintenance of real (private or public) property. State designation does not change or infringe upon existing water rights or other vested property rights. It does not restrict the maintenance of existing uses. Recreational dredge mining (defined as the use of suction dredges with

an intake diameter of 5 inches or less, and equipment rated at 15 horsepower or less) falls under the stream channel alteration category and not dredge or placer mining.

The Board considered the impact of protected river designations on the social, economic, and environmental livelihood of the region. To protect the public interest, current resource uses, and the multiple-use character of the basin, the Board designates river/stream reaches as indicated below. Each river reach in this plan has been found to qualify for the level of protection identified.

#### Existing Designations

The Comprehensive State Water Plan:
Payette River Reaches adopted by the Board in
February 1991 designated state protected rivers to
preserve outstanding resource values. The Payette
River Basin Plan retains those state protected river
designations as listed below and depicted in Map 1.

North Fork Payette River (9.6 miles): Cabarton Bridge to Rainbow Bridge - recreational South Fork Payette River (7.9 miles): Deadwood River confluence to Big Pine Creek confluence recreational

The following activities are prohibited on these reaches:

- construction or expansion of dams or impoundments;
- construction of hydropower projects;
- construction of water diversion works;
- dredge or placer mining;
- mineral or sand and gravel extraction within the stream bed; and
- stream channel alterations.

Exceptions to the above prohibitions include:

• New diversion works shall be limited to pump

installations that do not create an obstruction in the river, and are sized to supply water for the standard domestic definition or a capacity sufficient for stock water or developed rest areas, picnic, and campground purposes (not to exceed a diversion rate of 0.04 cubic feet per second).

• Stream channel alterations necessary to maintain and improve existing utilities, roadways, managed stream access facilities, and diversion works, and for the maintenance of real (private or public) property.

North Fork Payette River (18.4 miles): Rainbow Bridge to Banks - recreational South Fork Payette River (7.6 miles): Middle Fork confluence to Banks - recreational Payette River (7.2 miles): Banks to Beehive Bend boat access - recreational

The following activities are prohibited on these reaches:

- construction or expansion of dams or impoundments;
- construction of hydropower projects;
- construction of water diversion works;
- dredge or placer mining;
- mineral or sand and gravel extraction within the stream bed; and
- stream channel alterations.

Exceptions to the above prohibitions include:

- New diversion works shall be limited to pump installations for the following purposes that do not create an obstruction in the river: irrigation of basin lands; stock water; developed rest area, picnic and campground areas; and for domestic, commercial, municipal and industrial needs.
- Stream channel alterations necessary to maintain and improve existing utilities, roadways, managed stream access facilities, and diversion works, and for the maintenance of real

(private and public) property.

South Fork Payette River (20.3 miles): Sawtooth National Recreation Area boundary to Deadwood River confluence - recreational

South Fork Payette River (16.0 miles): Big Pine Creek confluence to Middle Fork confluence recreational

The following activities are prohibited on these reaches:

- construction or expansion of dams or impoundments;
- construction of hydropower projects;
- construction of water diversion works;
- dredge or placer mining;
- mineral or sand and gravel extraction within the stream bed; and
- · stream channel alterations.

Exceptions to the above prohibitions include:

- New diversion works shall be limited to pump installations for the following purposes that do not create an obstruction in the river: irrigation of basin lands; stock water; developed rest area, picnic and campground areas; and for domestic, commercial, municipal and industrial needs.
- Stream channel alterations necessary to maintain and improve existing utilities, roadways, managed stream access facilities, and

diversion works, and for the maintenance of real (private and public) property.

• Recreational dredge mining is permitted as regulated by the Idaho Department of Water Resources and Idaho Department of Lands.

Alteration of the streambed, except for maintenance and repair of existing diversion works, must comply with the Idaho Stream Channel Alteration Rules and Minimum Standards.

## Additional State Protected Designations

The Board considered the impacts of additional protected river designations, and determined it is in the public interest to designate the additional stream reach listed below and depicted in Map 1.

North Fork Payette (23.6 miles): Headwaters (including Cloochman and Trail creeks) to Payette Lake Inlet - recreational

The following activities are prohibited on this reach:

- construction or expansion of dams or impoundments;
- construction of hydropower projects;
- construction of water diversion works;
- · dredge or placer mining;
- mineral or sand and gravel extraction within the stream bed; and
- stream channel alterations.

Exceptions to the above prohibitions include:

- Stream channel alterations necessary to maintain and improve existing utilities, roadways, managed stream access facilities, and diversion works, and for the maintenance of real (private and public) property.
- Alterations of the stream channel for installation of fisheries enhancement structures and other activities necessary for fishery management.
- This designation is not intended to restrict current and future operations at Upper Payette Lake by the Lake Reservoir Company, including enlargement of the dam or lake.

Alteration of the streambed, except for maintenance and repair of existing diversion works, must comply with the Idaho Stream Channel Alterations Rules and Minimum Standards.

## NORTH FORK PAYETTE HYDROPOWER

#### PROJECT PROPOSAL

The Board retains the current state protected designation on the North Fork Payette River that prohibits hydropower projects. Gem Irrigation District requested an amendment to this designation to construct a hydropower project in the Smiths Ferry to Banks reach. The project proposal is described in the Payette River Basin Plan.

When deciding whether to amend the designation, the Board was guided by the hydropower siting policy (Policy 4E) in the *Idaho State Water Plan* (Idaho Water Resource Board, 1996). This policy states:

The Idaho Water Resource Board believes energy conservation and efficiency improvements are the most desirable methods to provide for additional power requirements. The state will be best served through conservation and the upgrading of existing energy systems. The Board prefers that new hydropower resources be developed at dams having hydropower potential that do not currently generate power or do not generate at their maximum potential. New structures should be carefully evaluated to insure that benefits to the state outweigh any negative consequences associated with the proposed development" (Idaho Water Resource Board, 1996).

Public and agency comment about the project identified many concerns, and the need for additional information and studies. The Board requested additional specific information from the project applicant by letter during this planning effort. The applicant did not provide any information in response to the Board's request, including demonstrating that the project is financially feasible.

Adequate information has not been

presented to justify changes to the existing state recreational river designation. Based on the information that is available, the Board concludes that it is not in the public interest to modify the existing state recreational river designation to allow the proposed North Fork Payette hydropower project by Gem Irrigation District. This action is consistent with the Payette River Citizens Group's recommendations concerning the North Fork Payette hydropower project.

#### MINIMUM STREAM FLOWS

It is the policy of Idaho that the Board should seek to appropriate waters in the state for instream flow purposes when it is in the public interest. Idaho Code, Title 42, Chapter 15 provides the authority and spells out procedures for the Board to file applications to appropriate water for instream flows. A minimum stream flow is the minimum instream flow or lake level required to protect fish and wildlife habitat, aquatic life, recreation, aesthetic beauty, navigation, transportation, or water quality in the public interest. By law, a minimum stream flow is not an ideal flow, but the minimum necessary to achieve the objectives. The water right is held by the Board and is junior to all earlier water rights. It is not a guaranteed minimum flow, but is only achieved after senior water rights are satisfied.

In order for the Board to acquire a minimum stream flow, a process separate from the development of a comprehensive state water plan occurs. Studies to determine the quantity and timing of the minimum stream flow may need to be conducted. The Director of the Idaho Department of Water Resources determines whether the minimum stream flow right is granted based on guidance in the Idaho Code. Legislative review of minimum stream flow rights granted by the Idaho Department of Water Resources is then required.

The Idaho Water Resource Board will take

action to obtain a minimum stream flow on the North Fork Payette River at Fisher Creek above Payette Lake. The reach location is depicted on Map 1.

The Big Payette Lake Management Plan, established by the Big Payette Lake Water Quality Council and adopted by the Idaho Legislature in 1998 recommends the Board obtain a minimum stream flow for the North Fork Payette River below Upper Payette Lake to protect kokanee spawning and resident trout species. The Idaho Department of Fish and Game conducted a modeling study, using the Riverine Habitat Simulation program, to model the relationship between flow and availability of fish habitat (Apperson, 1998). The suggested minimum stream flow is 60 cubic feet per second at the gage below Fisher Creek from July 1 to September 7.

The available period of record for the gage at Fisher Creek is October 1994 to April 1998, a period of above average streamflows. The calculated flow duration was adjusted using a longer record station at Lake Fork above Jumbo Creek (USGS 13240000) to produce a duration curve that reflects a long-term average (1946-97). Based on this adjusted flow duration, the suggested minimum stream flow of 60 cubic feet per second for July through September would be met or exceeded about 59 percent of the time. The Board will file an application for this water right with the Idaho Department of Water Resources.

#### Recommendations

The Board has the authority to establish water policy for the state of Idaho, and to plan for the improvement, development, and conservation of water resources through development and implementation of the State Water Plan [Idaho Constitution, Article 15, Section 7]. The Board requests that federal, state, and local agencies, and

the entities referenced work with the Board to implement the recommendations contained in the plan. State agencies are asked to "exercise their duties in a manner consistent with the comprehensive state water plan" [Idaho Code 42-1734B (4)]. Federal agencies are required to consider a comprehensive state water plan, and are encouraged to manage their lands in a manner consistent with the recommendations contained in this plan.

Recommendations contained in the Payette River Basin Plan reflect input received from citizens and agencies. The Payette River Citizens Group submitted recommendations to the Board for their consideration. After considering Citizens Group agency input, and public comment on a Draft Payette River Basin Plan, the Board makes the following recommendations.

# PROTECTED RIVER DESIGNATIONS Federal Wild and Scenic River System

The Forest Service and Bureau of Land Management have found reaches within the Payette River Basin eligible for further study as potential federal wild and scenic rivers. Additionally, three national forests (Boise, Payette and Sawtooth) within the Payette River Basin are reexamining the eligibility of rivers and streams for possible wild and scenic designation during the forest plan revision process. Suitability studies to determine whether to recommend designation to Congress would occur after forest plan revisions are complete.

The Board recommends that the revised forest plans recognize state protected river designations as the best option for managing and protecting the outstanding resource values of waterways in the basin. The Forest Service and Bureau of Land Management are reminded that state designations should not be the basis for seeking inclusion of such waterway in the National Wild and

Scenic Rivers System [Idaho Code 42-1736]. The Board does not support federal wild and scenic river designation of any waterway in the Payette River Basin, believing state designation serves the general public equally well and best addresses local concerns. Because of the comprehensive scope of state water planning, the Board encourages the Bureau of Land Management and Forest Service to work within the state water planning process, and to support state protected river designations.

## Northwest Power Planning Council Protected Area Designations

The Board designates the rivers shown on Map 1 as state protected rivers. The Board recommends that the Northwest Power Planning Council protected area designations reflect the state protected river designations.

#### WATER ALLOCATION

The Payette River Citizens Group was unable to reach consensus on many issues that concern water allocation. A Payette River Watershed Council was formed in 1996 to improve communication, cooperation, and sharing of information about the Payette River and its watershed. In past years the Watershed Council has worked towards consensus about releases from Cascade and Deadwood reservoirs. Changing water needs and additional demands will highlight the importance of this group to resolve water issues. The Board supports the continued efforts of the Watershed Council as a forum to discuss and resolve water allocation and other water-related issues at the local level. The Board encourages the Payette River Watershed Council to expand its forum to respond to issues identified in this plan.

#### Flow Augmentation

Flow augmentation involves using water stored in the Snake River Basin reservoirs in Idaho to flush smolts to, and in some cases through, the reservoirs behind the lower four Snake River Dams (located outside Idaho) as a means to aid salmon recovery. The Idaho Department of Water Resources recently examined the effectiveness of flow augmentation in improving velocity to assist migrating juvenile chinook salmon (Dreher, 1998). The Department demonstrated that flow augmentation provides minimal improvements in average flow velocities in the lower reach of the Snake River, and does not come close to achieving velocities that occurred before construction of the four dams below Lewiston. It is also important to note that the Snake River Basin in Idaho (which includes the Payette River Basin) has insufficient water quantities in dry years to achieve the seasonal average flow objectives identified by the National Marine Fisheries Service.

Using Payette River Basin water for flow augmentation jeopardizes the economic and environmental health of the basin. Out-of-basin use precludes the availability of water to meet present and future demands such as irrigation in drought years, reservoir and river recreation, and future municipal supply. Flow augmentation also limits the capability to manage releases to protect water quality and resident fisheries.

The evidence and conclusions presented by Dreher (1998), and the potential economic and environmental impacts in the Payette River Basin and to the State, point out that continued use of water from the Snake River Basin to flush smolts in the lower reach of the Snake River is not justified. There is no evidence that temperature control and velocity can be improved by using Payette River Basin water for flow augmentation.

#### Water Conservation

Water conservation in irrigation practices was identified as an issue for further study. There is concern that conservation may result in forfeiture or

partial forfeiture of water rights, and may reduce ground water recharge. The Board recommends further study of irrigation water conservation.

#### WATER STORAGE AND DELIVERY

## Irrigation Water Measurement, Delivery and Management

To promote optimum and efficient water use, continued improvements in water delivery and measurement are necessary. To better track water supply and availability, the Board recommends that the U.S. Geological Survey, U.S. Bureau of Reclamation, Idaho Department of Water Resources, Water District 65, or some partnership of these entities pursue installing and funding additional automated gages in the following order of priority:

- 1) Middle Fork Payette just upstream of the confluence with the South Fork Payette River
- 2) South Fork Payette (main Payette River) just upstream of Banks

Currently, installation and maintenance of gages in the basin are funded by the U.S. Geological Survey, Idaho Department of Water Resources, U.S. Bureau of Reclamation, Water District 65, and Idaho Power Company. Other sources to fund the installation and maintenance of gages should be explored.

Continued improvements in water measurement and tracking by the automated accounting system for Water District 65 are desirable. Improvement is needed in the tracking method for pump diversions, possibly through installation of flow meters or use of power consumption coefficients. Additional water measurements are needed to track diversions more closely, including measurement of smaller diversions (30 cubic feet per second or less) on a weekly basis, and larger diversions on a daily basis. Additional investments in automating Water District 65's water delivery system is encouraged.

The desire to insure efficient and optimal use of the basin's water, coupled with the need to improve or protect water quality, has led to an examination of the many diversions and water delivery systems in the basin. Diversion upgrades have been recommended to improve water quality, fisheries habitat, and water delivery efficiency. Some recommendations are listed in Tables 1 and 2. Funding priority should reflect projects that accomplish multiple objectives, and that meet the objectives, goals, and recommendations contained in Payette River Basin Plan and the *Idaho State Water Plan*.

Water District 65 is the largest water district in the Payette River Basin. There are four additional water districts active in the basin. Improved communication and coordination between these water districts will maximize the benefits of water management.

#### J Ditch Irrigation Pipeline Project

The J Ditch irrigation pipeline, designed to improve water quality in Cascade Reservoir, will eliminate the discharge of McCall's treated wastewater effluent into the North Fork Payette River. The J Ditch pipeline mixes treated effluent with irrigation water, and transports both irrigation water and enriched irrigation water through a paired pipeline to downstream irrigators within the Mud Creek watershed. A Lake Fork Irrigation District canal system serving those same irrigators will be replaced.

Table 1. Recommendations for Cascade Reservoir Watershed Diversions.

Diversion	Study Recommendations
Lake Fork Watershed	
Lake Fork Watershed Westside Lake Fork Ditch	Catch point: Install weir flow measurement device, inlet box should be raised to mitigate backwater problems Replace corroding 24" steel outlet pipes with PVC; Cipolletti weir blade needs sharpened or replaced; scheduled maintenance and program to clear vegetation and other obstructions
Lake Irrigation District Canal Spink-Barker Ditch	Install a measuring device - a ramp flume structure suggested Replace diversion with more permanent structure; requires headwall and attachment to corrugated metal pipe; install stage recorder and stilling well with stage recording equipment at weir
Ditch F	Install 24" slide gate on ditch with a check structure; install small ramp flume structure; invert at head should be lowered slightly
Pump F	Install flow meter
Mud Creek Watershed Ditch B	Install 36" headgate structure at diversion and replace existing culvert; install 36" headgate at wasteway with turnout to farm ditch; install ramp flume structure with staff gage at both; replace check structure in creek
Ditch C	Install 36" headgate structure at the diversion point and replace existing culvert; install 36" headgate structure at wasteway with turnout to farm ditch; install ramp flume structure and staff gage at both; replace check structure serving farm ditch
Ditch D	Install 12" headgate structure; install weir flow measurement device on headgate; can remove
Ditch L	check/waste box; install fencing to keep livestock out Replace 60" corrugated metal pipe with 2 -36" gated culverts and bulkheads; install ramp flume structure and staff gate
Stock Pond B	Remove structure as it has been abandoned
Boulder Creek Pump B Stock Pond D/ Ditch A	Clean or replace trash rack; install flow meter for each pipe Install staff gage and 3' Cipolletti weir structure; rehabilitate eroded rock chute spillway with concrete design; clear head of spillway
Upper Jug Reservoir Ditch K	Clear dead timber from reservoir Install riprap bank protection, sharpen or replace weir blade
Gold Fork	
Pump C	Replace sediment diversion dam with more permanent structure; install flow meter; clean oil and diesel fuel contaminated area
Pump D Center/Gold Fork Canal	Replace sediment diversion dam with more permanent structure; install flow meter on pump Install Cipolletti weir in canal above Gold Fork flume crossing; reconstruct north wingwall at
	diversion; repair several canal sections Install 12" gated turnout; install staff gage and 2.5' Cipolletti weir or flume structure; require
Ditch E	new outlet facility
Ditch G	Install 36" gate and headwall structure; install 6' Cipolletti weir structure; extend ditch to river; install wasteway structure at confluence with side channel
Ditch H Ditch I	Install 15" gate and headwall structure; install 2.5' Cipolletti weir or flume and staff gage Install Cipolletti weir and gage staff; install headwall; install 4" Cipolletti weir o flume
	structure and staff gage; recommend regular clearing
Stock Pond C	Install flume structure in farm ditch and staff gage; raise contour ditch around meadow; install drop structure in wasteway
Willow Creek	T 11 Cl
Diversion 701 Diversion 702	Install flow meter Install 15" gate and headworks structure; install 1" Cipolletti weir

Sources: Natural Resources Consulting Engineers, Inc., 1996

**Table 2. Lower Payette Diversion Inventory Recommendations.** 

Diversion	Recommendations	
Bilbrey Enterprise Diversion	Signage to inform recreationists about diversion	
Boise Cascade- Emmett	Construction of a permanent structure proposed	
Eagle Island Diversion	Signage to inform recreationists about diversion	
Farmers Cooperative Diversion	Possibility of additional signage upstream to inform recreationists	
Last Chance Diversion	Culverts installed for Plaza Road are undersized, eventually county will replace with clear	
	span structure, might want to consider Parshnall measuring flume; signage to inform	
	recreationists of diversion dam and portage route	
Lower Payette Diversion	Possible consolidation with Simplot pumps; signage to inform recreationists of diversion	
	and possible portage	
Seven Mile Slough Diversion	Possibility of improving diversion to make the structure more permanent; install trash rack	
	in front of headworks for safety; signage to inform recreationists about diversion and	
	possible portage	
Washoe Diversion	Headgate may need rebuilt; repair needed to check structure; signage to inform	
	recreationists about diversion and recommending portage route	
Acord Diversion	Possible permanent structure	

Source: Quadrant Consulting, Inc., et al., 1997.

The project replaces diverted waters from Mud Creek and Lake Fork, with the desired benefit of improving instream flows in these waterways. The Board recommends that the Idaho Department of Water Resources work with the Lake Fork Water District to develop an automated accounting program to more efficiently track rental pool, natural flow, and storage water rights. This will improve the watermaster's ability to deliver and manage water.

#### Water Storage

The Payette River Citizens Group identified the need for additional water storage for municipal water supply, irrigation, and flood control. Several options for meeting municipal water supply are listed in the next section. The need, feasibility, and opportunities to provide additional storage for these uses should be further explored. Small and large reservoir sites should be considered. The Board will consider reserving additional sites in the basin if warranted.

#### MUNICIPAL WATER SUPPLY

Basin population growth exceeds the state average, and is projected to continue to do so. Planning for and securing adequate water supplies to meet the demands of this growth needs to be a priority. Some municipalities need to acquire additional water supplies, or build infrastructure to provide for growth. These needs are summarized in the Payette River Basin Plan.

Idaho law [Idaho Code 42-202] provides that municipalities can appropriate water for reasonably anticipated future needs as determined through comprehensive plans or other supporting data. All communities are encouraged to pursue long-term planning, projecting future growth and reviewing water systems, to determine if current municipal water supply is adequate to meet projected growth. Water applications may be filed with the Idaho Department of Water Resources if a need is determined by a comprehensive plan or other supporting data.

Numerous options are available for meeting future water demands. The Board supports making water conservation a priority strategy. Other options that can be considered in long-term planning include:

- Measuring delivery to user and structuring municipal water rates to reflect the quantity of water used, instead of a flat rate. This measure can result in reduced water use.
- Purchasing a senior water right from a willing seller.
- Requiring land use developers to demonstrate that adequate water supplies are available for projects before local governments authorize them. The developer should work with the Idaho Department of Water Resources to identify water sources to serve the needs of the development. If the development will rely on a community water supply, water rights associated with the developed land should be gifted to the municipality by the developer.
- Obtaining contracts from the State Water Supply Bank.
- Obtaining storage contracts from the U.S. Bureau of Reclamation storage facilities.
- Condemning senior water rights with compensation.
- Building water storage projects that are consistent with the *Idaho State Water Plan*. The Payette River Citizens Group has supported building storage reservoirs to supply future needs. The Board supports this recommendation only if it may be accomplished with minimal environmental and social impact, and if adequate attention has been given to meeting demand through water conservation efforts. Off-channel reservoirs which provide flood control and fishery enhancements may provide a reasonable alternative.

In the *Idaho State Water Plan*, the Board identified a potential reservoir site on the Gold Fork River for 80,000 acre-feet of irrigation storage (Idaho Water Resource Board, 1996). The Board will continue to reserve this potential reservoir site and include municipal water supply as a project purpose.

The City of Horseshoe Bend needs to identify a secure water supply. The Board encourages the City to initiate a study of various alternatives. Additional alternatives for the City may include rehabilitating the wells abandoned in the 1970s and treating the water.

Other basin communities will need funding to replace aging infrastructure, or upgrade infrastructure to meet water quality standards and increased demands. A number of funding options were suggested by the Payette River Citizens Group, including revenue bonds through the Idaho Water Resource Board, user fees to generate funds allocated specifically to a water treatment facility, and federal funding.

#### WATER QUALITY

Planning and administration of water quantity and water quality are divided between two state agencies. The Idaho Department of Water Resources is primarily responsible for programs relating to water quantity, and the Idaho Division of Environmental Quality is primarily responsible for protecting the quality of the state's water. The Board has the authority to "study and examine" water quality issues, and "advise, cooperate and counsel" the Idaho Division of Environmental Quality about these issues [Idaho Code 42-1734(15)].

The Board will coordinate with the Idaho

Division of Environmental Quality on water quality concerns in the basin when it is consistent with the Board's authority. The Board recommends local citizens participate in the activities of the Southwest Basin Advisory Group and the several Watershed Advisory Groups active in the basin in preparing water quality management plans. The Board will address at a later date actions and recommendations contained in the Idaho Division of Environmental Quality's water quality plans for which they have responsibility or authority.

## Coordination of Well and Septic System Installation

The Idaho Department of Water Resources is responsible for permitting the construction of wells. The Health District establishes guidelines for septic tank and leachfield locations and design. This current system can result in wells being permitted and constructed without specific knowledge of local septic tank or field locations, risking well contamination. The Payette River Citizens Group has expressed a desire to see improved coordination in well and septic system permitting. The Board recommends that the Idaho Department of Water Resources and Health District examine additional opportunities to improve coordination between their permitting responsibilities.

Increased urbanization, soil characteristics, and the hydrologic conditions in the basin indicate conventional septic systems will not be adequate to protect the resource. Development in rural areas with individual septic systems and domestic wells increases the potential for water quality and health problems. The Board recommends that subdivisions exceeding specified sizes or densities should be required to construct community waste treatment systems or hook-up with existing systems. This should be a high priority for development in Long Valley, Garden Valley, along the Middle Fork Payette River, and the lower Payette Valley.

In areas where individual septic tanks continue to be used, the Board recommends that counties and communities require lot sizes reflect the assimilative capacity of soils to safely site leachfields and wells. Where individual septic tanks prove acceptable, the density should be based on the assimilative capacity of the soils for the developed area. It may be necessary to establish a community well away from the influences of septic systems to protect drinking water supplies.

#### Minimum Stream Flows

Minimum Stream Flow - North Fork Payette Below Payette Lake Outlet to Cascade Reservoir

In May 1994 the Board filed an application with the Idaho Department of Water Resources for a minimum stream flow on the North Fork Payette River from Payette Lake Outlet to Cascade Reservoir for the protection of water quality, wildlife habitat, aquatic life, and recreation values. The Board has not asked the Director of the Department of Water Resources to process the application, because they wanted to first consider public response provided during the development of the Payette River Basin Plan.

The minimum stream flow considered in the Draft Payette River Basin Plan was 145 cubic feet per second from April 1 to June 30, and 72 cubic feet per second from July 1 to March 31. (The original application filed in 1994 was for 145 cubic feet per second from April 1 to September 30, and 72 cubic feet per second from October 1 to March 31.) Based on stream flow records from 1944 to 1997, the suggested minimum stream flow of 145 cubic feet per second for April through June would be met or exceeded about 83 percent of the time. The suggested minimum stream flow of 72 cubic feet per second for July through March would be exceeded about 64 percent of the time. (The flow duration curves do not distinguish between natural flows and storage water.)

The Draft Payette River Basin Plan proposed to process this minimum stream flow water right application. Written comment and testimony revealed some concerns that should be addressed before the Board pursue processing its minimum stream flow water right application. Local citizens, including the McCall City Council and Mayor, have expressed support for the minimum stream flow.

The Lake Reservoir Company, managers of Payette Lake storage water, have concerns about the proposed minimum stream flow. The Company's operations at Payette Lake would not be impacted, because of its senior water right. However, the Company is concerned that the public will expect releases of storage water from Payette Lake to meet a minimum stream flow even in years when this may not be practical. This expectation could impact the good public relations the Company has strived to establish. In July through October the proposed minimum stream flows are usually achieved through release of storage water.

Most concerns may be resolved by discussions between the interested parties. The Board encourages the Lake Reservoir Company, Trout Unlimited, McCall and Valley County representatives, and interested individuals to work cooperatively to address the concerns raised. The Payette River Watershed Council would be a good forum for these discussions. The Board will consider a request to process the minimum stream flow water right application when the interested parties reach a satisfactory resolution, maintaining the May 1994 priority date in the interim.

#### Minimum Stream Flow Studies

In support of recommendations by the Payette River Citizens Group, the Board requests that instream flow technical studies or analyses be conducted to determine if minimum stream flows are warranted for the following river reaches:

- Lake Fork Little Payette Lake to Cascade Reservoir:
- Gold Fork River Gold Fork diversion dam to Cascade Reservoir; and
- Several reaches of the Payette River:
  - Banks to Black Canyon
  - Black Canyon to Letha
  - Letha to Snake River confluence

Idaho law requires specific data to support an application for a minimum stream flow. The Board currently does not have the data required to pursue minimum stream flows on the river reaches listed above. The Board recommends that the Idaho Division of Environmental Quality and/or the Idaho Department of Fish and Game conduct studies to quantify flows and acquire other necessary information to process minimum stream flow applications for the above-mentioned streams. First priority should be given to Lake Fork because of the extensive investments made in constructing the J Ditch irrigation pipeline.

Minimum pools were administratively established by the U. S. Bureau of Reclamation for Cascade and Deadwood reservoirs. The Idaho Department of Fish and Game has noted that these minimum pools were intended for winter periods, and based on nutrient loading conditions occurring in 1980-81. Reexamination of minimum pools to maintain water quality and for fishery enhancement is needed. The Board supports minimum pools for these reservoirs, as long as they do not interfere with irrigation storage and delivery authorities.

#### Irrigation Diversion Improvements

Several studies have occurred in the basin examining opportunities to improve diversion structures and/or irrigation practices. A summary of recommendations from these studies are contained in Tables 1 (page 13) and 2 (page 14).

Recommendations may include converting from

flood to sprinkler irrigation, consolidating or relocating diversions, controlling stream/canal bank erosion, and improving water control and measurement. The Board supports pursuing funding for these projects, focusing on those improvements recommended in the Idaho Division of Environmental Quality's implementation plans for water quality management.

#### Roads and Sediment

Best management practices are encouraged to mitigate or minimize sediment contributions from roads. The filtering capabilities of riparian zones should be protected. Slope stabilization should be required and can include using gravel or seeding. Runoff control should be required.

#### FLOOD MANAGEMENT

As the basin sees an increase in population and development, the potential impact of flood events could increase. Recent flooding has led to public concern about floodplain development and taxpayer liability for future damage from flood events. The Board encourages local governments to take proactive actions to prevent or minimize impacts from future flood events. Pre-disaster flood planning and floodplain management are essential elements in reducing flood risk.

The Payette River Citizens Group supports local governments applying stricter regulations for floodplain development. Local governments should consider prohibiting any new development in the 100-year floodplain, or at least allowing only development that is adequately protected. Floodplain cut and fill standards should be adopted that require compensating for fill placed in the floodplain by excavation to maintain stream channel flood capacity. Higher elevation standards for structures in the floodplain should be considered. These activities may result in reduced flood

insurance premiums through the Community Rating System discussed later in this section.

It is State policy to encourage protection of floodplains, and rely on management rather than structural alternatives in reducing or preventing flood damage (Idaho Water Resource Board, 1996; See Policy 3I). Future growth may lead to increased land values and pressures to allow development in floodplains. In keeping with State policy, the counties and communities are encouraged to zone floodplains for appropriate uses that avoid expensive structural flood control and flood repair. Land use planning is a more viable and economical way to minimize flood damages. Structural controls are expensive to build and maintain. Lack of adequate maintenance can result in failure and an increased danger. The current lack of federal funding to repair damaged levees or to construct new ones must be considered in state planning.

The adoption of floodplain ordinances as a participant in the National Flood Insurance Program (managed by the Federal Emergency Management Agency) is one nonstructural alternative for flood management. The Board encourages all counties and communities in the basin to participate in the National Flood Insurance Program. Participation has resulted in adoption of floodplain ordinances which outline land use measures to minimize flood damage. The Board encourages the counties and communities to continue monitoring floodplain development to ensure ordinances are followed and that development does not increase potential flood damage.

As participants in the National Flood Insurance Program, communities may enhance flood management and further minimize flood risks by enrolling in the Community Rating System. This program provides a means for local governments to voluntarily engage in additional flood management activities, choosing from several options with minimal investment. The result is decreased risks to property and life, and reduced flood insurance premiums for property owners. Valley County is the only basin jurisdiction currently participating in this component of the National Flood Insurance Program. Other communities are encouraged to contact the State Flood Coordinator at the Idaho Department of Water Resources to enroll in the Community Rating System.

Jurisdictions from Horseshoe Bend downstream may want to consider forming a "flood management committee" to prepare a flood management plan. This plan should include exploring coordinated management of the existing levee system to insure proper maintenance and adequate protection. Currently, regulatory oversight of levee construction and maintenance is limited. The Board recommends that minimum standards for levee maintenance and construction be established. Repair or replacement of levees should be monitored so that improvements do not place additional areas at risk by transferring erosion and flood problems to downstream property owners. The committee is encouraged to investigate alternatives to levee replacement and expansion. The "flood management committee" should explore the possibility of forming a Flood Control District for long-term management of levees and the floodplain.

Additional information is required to develop a flood management plan. Accurate floodplain and floodway mapping is needed that reflects the current river channel configuration.

Aerial photography produced during the 1997 flood event should be obtained and input into a geographic information system to produce accurate maps.

Development of a computer model to help determine what is inundated at various flows is desirable.

More accurate spatial information is needed about levee location along the lower reach of the Payette

River so that coordinated maintenance and management may occur. Spatial identification of all levees using Global Positioning System (GPS) technology is suggested.

#### RESOURCE DEVELOPMENT

The Board has not amended the state recreational designation to allow construction of a hydropower project proposed for the Smiths Ferry to Banks reach of the North Fork Payette River for the reasons cited on page 9. Recognizing the future need for new generating capacity, the Board believes there are alternatives to meet future energy demands, including expansion of capacity at existing hydropower facilities in the basin. Developing hydropower at existing dams in the basin should also be explored in more depth. Some of these options may be preferable because of favorable economics, and the potential to minimize environmental and other impacts.

#### **FISHERIES**

Many fishery issues in the basin are associated with water quality concerns.

Recommendations made in the earlier *Water Quality* section address some of these concerns, including minimum stream flows, improvements to diversion structures, and irrigation management.

Recommendations specific to reaches in the Cascade Reservoir watershed are summarized in Table 3.

The Board supports further evaluation of the design and financial feasibility of these alternatives. An alternative to expensive fish screens may be orienting diversion openings parallel to flows to minimize diverting fish into ditches, and positioning diversion structure overflows where fish can most easily use

them. Another alternative is to consider constructing or enlarging existing headwater storage reservoirs to establish lake fisheries and enhance downstream summer flows. Cooperative funding among the many players involved in fisheries, water

quality, and water delivery should be explored.

Table 3. Possible Alternatives to Address Fisheries Concerns in the Cascade Reservoir Watershed.

Priority/Diversion	Problem(s)	Possible Alternatives
Gold Fork Diversion - About 4 mi. up Gold Fork from State Highway 55 bridge on Cascade Reservoir	Dam (18 ft. high) with occasionally no flows below that blocks 46 miles of trout habitat capable of producing 250,000 native trout annually for Cascade Reservoir.	- Fishway and partial canal screening - Minimum flow
2) Lake Irrigation District Canal (LID) - Below Little Payette Lake on Lake Fork	Diversion claims adults and juvenile fish in large numbers. The diversion is located immediately downstream of a major rainbow / redband spawning area. There is occasional dewatering of Lake Fork.	<ul> <li>Modify diversion</li> <li>structure and/or orientation</li> <li>to flow</li> <li>Partial fish screen</li> <li>Coordination of rental</li> <li>pool releases</li> </ul>
3) Cruzen Canal - 5 miles below Lake Irrigation District Canal on Lake Fork	Diversion claims many adult and juvenile native redband/rainbow trout that would otherwise enter Cascade Reservoir. There is frequent dewatering of Lake Fork.	<ul> <li>Modify diversion structure and/or orientation to flow</li> <li>Partial fish screen</li> <li>Flow measuring device to pass rental pool releases</li> </ul>
4) Brown's Pond Dam - 2 miles above Little Payette Lake on Lake Fork	Dam blocks fish migration to many miles of high quality fish habitat.	- Fishway
5) Alpha Ditch - Located on Clear Creek	Diversion diverts fish claims native redband/rainbow trout adults and juveniles. There is dewatering.	- Modify diversion structure and/or orientation to flow - Partial fish screen

Source: Anderson, Idaho Department of Fish and Game, 1998.

#### **Bull Trout**

Bull trout are listed as threatened in Idaho under the Endangered Species Act. In 1996 the state of Idaho prepared a *Bull Trout Conservation Plan* before the listing occurred, to identify conservation actions to recover the species (Batt, 1996). Implementation of this plan in the Payette River Basin occurs under the direction and guidance of the Southwest Basin Native Fish Watershed Advisory Group, with assistance from a technical group. This strategy focuses on locally developed solutions applicable to individual watersheds.

The state will continue bull trout recovery efforts as defined in the state of Idaho plan. The Board supports the actions of the Southwest Basin Native Fish Watershed Advisory Group (WAG),

believing the state is best able to address the challenges to recover this species. The U.S. Fish and Wildlife Service is the federal agency charged with recovery of the bull trout since its listing under the Endangered Species Act. The Board recommends that the U.S. Fish and Wildlife Service recognize and work with the state WAGs to develop recovery strategies for the bull trout and avoid duplicative efforts.

Bull trout focal habitats are "critical areas supporting a mosaic of high-quality habitats that sustain a diversity or unusually productive complement of native species" (Batt, 1996). Bull trout focal habitat for key watersheds in the Payette River Basin are listed in Table 4. Protecting these reaches that support healthy sub-populations can

increase persistence of adjacent populations in lower quality habitats. Land and water management activities should minimize impacts to these reaches.

#### Table 4. Bull Trout Focal Habitat in the Payette River Basin.

#### Gold Fork Bull Trout Key Watershed

North Fork Gold Fork River and tributaries (18.5 miles) - Headwaters to South Fork Gold Fork River confluence, and unnamed perennial tributaries upstream of the Lodgepole Creek confluence

South Fork Gold Fork River (4.7 miles) - Headwaters to North Fork Gold Fork River confluence

#### South Fork Payette Bull Trout Key Watershed

South Fork Payette River (9.7 miles) - Smith Falls to Mink Creek confluence

Goat Creek (5.8 miles) - Blue Rock Lake Creek confluence to South Fork Payette River confluence

Baron Creek (7.6 miles) - Braxon Lake Creek confluence to South Fork Payette River confluence

Wapiti Creek (5.5 miles) - Headwaters to South Fork Payette River confluence

Canyon Creek and tributaries (14.8 miles) - Headwaters to South Fork Canyon Creek confluence, and the following tributaries:

- · North Fork Canyon Creek Headwaters (including unnamed perennial headwater tributary) to mouth
- South Fork Canyon Creek Headwaters to mouth

Clear Creek (12.5 miles) - Headwaters to Blacks Creek confluence,

Warm Springs Creek and tributaries (18.9 miles) - Headwaters to East Fork Warm Springs Creek confluence, and the following tributaries:

- · Middle Fork Warm Springs Creek Headwaters to mouth, including unnamed perennial tributary
- East Fork Warm Springs Creek Headwaters (including unnamed perennial headwater tributaries) to mouth

Scott Creek and tributary (9.6 miles) - Headwaters to South Fork Scott Creek confluence, and the following tributary:

• Smith Creek - Headwaters to mouth

#### <u>Deadwood Bull Trout Key Watershed</u>

Deadwood River (4.3 miles) - Headwaters to East Fork Deadwood River confluence

Deer Creek and tributaries (14.6 miles) - Headwaters to Deadwood River confluence, and the following headwater tributaries:

- North Fork Deer Creek Headwaters to mouth
- · South Fork Deer Creek Headwaters (including unnamed perennial headwater tributary) to mouth

South Fork Beaver Creek (0.1 miles) - One hundred yards upstream of Forest Trail 023 to Deadwood Reservoir Trail Creek (6.5 miles) - Headwaters to Deadwood Reservoir

#### Middle Fork Payette Bull Trout Key Watershed

Middle Fork Payette River and tributaries (18.3 miles) - Headwaters to Ligget Creek confluence, and unnamed perennial tributaries

Bull Creek and tributary (10.6 miles) - Headwaters to mouth, and the following tributary:

• Oxtail Creek - Headwaters to mouth

#### Squaw Creek Bull Trout Key Watershed

Squaw Creek and tributaries (11.2 miles) - Poison Creek confluence to Cold Spring Creek confluence, and the following tributaries:

- Pole Creek Headwaters to mouth
- Unnamed tributary Headwaters (located in T. 13 N., R. 2 E., southeast 1/4 of Section 15) to mouth
- Third Fork Squaw Creek and tributaries (15.8 miles) Headwaters to Mesa Creek confluence, and unnamed perennial tributaries

The Board recognizes the importance of

focal habitats in maintaining and recovering the bull

trout populations. State protected river designation of bull trout focal habitat would recognize the outstanding resource values provided by these reaches as important spawning habitat. State protected designation can complement actions proposed in the conservation plan, and would demonstrate the State's ability and willingness to protect critical habitat to ensure long-term persistence. The designation has the flexibility to specify activities allowed for the conservation of bull trout. The Board encourages the Southwest Basin Native Fish Watershed Advisory Group to consider recommending state protected river designation as one action in the bull trout conservation plan being prepared for the Payette River Basin. The Board will consider amending the Payette River Basin Plan to designate bull trout focal habitat for state protected designation at the request of the Watershed Advisory Group.

The Board recommends that other agencies conduct activities in bull trout key watersheds in a manner that does not impact the persistence of the species, and is compatible with the Southwest Basin Native Fish Watershed Advisory Group activities and recommendations. The Board recommends that the Idaho Department of Water Resources continue to coordinate a review of any water right applications in bull trout key watersheds with the Idaho Department of Fish and Game.

## AGENCY PLANNING AND COORDINATION

### Stream Channel Alteration Permitting

The public desires the stream channel alteration permitting process to be more efficient, particularly in emergency situations. Suggestions to achieve this goal include Idaho Department of Water Resources-sponsored public information meetings in areas susceptible to flooding to identify stream channel protection measures needed before flood season, and adequately funding agencies to review

the onslaught of applications after flood events. A streamlined permitting process is used in emergency situations. The Board encourages evaluating the permitting process to see if the process can be further expedited during emergencies. The Board recommends that the U.S. Army Corps of Engineers stream channel alteration permit functions be consolidated under the authority of the Idaho Department of Water Resources.

## Naming Convention for the Payette/South Fork Payette River

Citizens in the basin would like the Payette River from the Middle Fork Payette confluence to Banks officially recognized as the South Fork Payette. This requires a request to the U.S. Board of Geographic Names. The Board will complete the necessary paperwork to request an official name change. Boise County Coalition will help the Board with this effort, coordinating with local jurisdictions.

#### RECREATION

The demands on recreational resources in the Payette River Basin have increased significantly in the past ten years, particularly water recreation. These demands are the result of the outstanding recreational opportunities available in the basin, the growing regional and local populations, and reduced opportunities elsewhere. The budgets of agencies responsible for managing recreation opportunities are not keeping pace with the demand, and many agencies have experienced reduced budgets in recent years. In order to maintain the quality of the recreational experience and protect associated resources contributing to the experience, sufficient funding must be procured.

The Payette River Recreation Fee
Demonstration project, begun in 1998, provides one
mechanism to raise funds for government agencies
that provide recreational opportunities along the
South Fork Payette and main Payette rivers. Boise

County will receive some compensation for services provided through this program. However, other mechanisms must be explored to compensate state and local entities for services provided. The Board recommends that some of the fees collected from the federal fee demonstration project be used to examine and quantify the economic impact and benefits to the local counties and communities from the associated recreational activities.

Significant increase in whitewater recreation and agency actions to manage this use have the public concerned that recreation diversity and quality in the Payette River corridor is diminishing. The public desires to maintain a diversity of recreation opportunities along the river corridor. Many feel that funding and recreation management has focused on boating recreation to the detriment of other recreation opportunities. This issue needs to be explored by the recreation management agencies. The Board recommends that all recreation management agencies work together to develop a Payette River corridor recreation management plan. This plan must strive to balance competing uses while maintaining a quality experience for all recreation activities. County commissions and local planning and zoning should be involved in plan development to incorporate their concerns, and ensure recreation activities are compatible with land use comprehensive plans.

#### Recreational Dredge Mining

During the public comment period for the Draft Payette River Basin Plan, the Idaho Gold Prospectors Association requested the Board amend state recreational river designations for three reaches in the Payette River Basin to allow recreational mining. The request was for the following reaches:

- Payette River Banks to Beehive Bend
- South Fork Payette Middle Fork Payette River confluence to Banks

• South Fork Payette - Deadwood River to Big Pine Creek

These are some of the state recreational river reaches designated by the Board in 1991 which prohibited stream channel alterations, including recreational dredge mining.

In considering the Idaho Gold Prospectors Association request, some concerns were identified during discussions with some of the resource agencies. The Idaho Department of Fish and Game indicates opening any of the South Fork Payette reaches would be incompatible with bull trout recovery efforts. Idaho Department of Parks and Recreation noted these reaches receive the most boating use in the basin by private and commercial boaters, and the possibility for user conflicts. The Payette River Basin contains a summary of the background history and other considerations in the Appendix.

The Payette River Citizens Group did not address this issue, because it was not raised until the final hearing for the completed Draft Payette Plan. The Board believes additional discussion between interested individuals needs to occur. The Board encourages the Idaho Gold Prospectors Association to meet with boaters, outfitters, and other recreationists to reach consensus. If an agreement is reached that provides adequate protection to the water resources, the Board will then consider amending the recreational designation to allow recreational dredge mining on the main Payette River.

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